

REMARKS

Claims 1-15 are pending in the application. Claims 5-14 stand allowed. Claims 1-3 and 15 stand rejected. Claim 4 stands objected to.

Applicant respectfully requests reconsideration in view of the foregoing amendments and the remarks hereinbelow.

Page 2 of the specification and claim 5 have been amended to correct minor typographical errors.

Objection to Claim 4

Claim 4 stands objected to as being dependent upon a rejected base claim.

It is noted that original claim 4 is an independent claim. It is submitted, therefore, that the objection to this claim is without basis and it is respectfully requested that the objection be withdrawn and the claim allowed.

Rejection of Claims under 35 U.S.C. 103:

Claims 1-3 and 15 stand rejected under 35 U.S.C. 103(a) as being obvious over Applicant Admitted Prior Art, (in specification pages 10-11) in view of Mochizuki Seiji (JP 60-184864A) and Gao et al. (US 6,757,003B1).

The specific AARP referenced by Examiner, namely in the specification at pages 10-11, is a description of a print head arrangement that is well known to give rise to a creasing problem in a thermal dye printer.

The ensuing solution to the problem, that is disclosed in the specification and set forth in apparatus claim 1, is the provision of “a crease-preventing roller ... having an elastic cover layer that can be stretched toward coaxial opposite ends of said roller to spread at least the regions of the dye transfer area in which crease formation can occur in order to oppose crease formation, ...” (claim 1)

Method claim 3 contains the corresponding limitation of: “stretching an elastic cover layer on a crease-preventing roller ... towards coaxial opposite ends of the roller, ...”. Method claim 15 contains the corresponding limitation of “deforming ... respective projections on the roller, to stretch an elastic cover layer on the projections towards the opposite ends of the roller ...”.

Examiner cites the Mochizuki Seiji and Gao et al. references for the proposition that these limitations are found in these references.

It is unclear where the Mochizuki Seiji reference discloses or suggests an elastic cover layer on the crease preventing roller. Specifically, this reference merely discloses a crease-preventing roller “the surface of which is provided with

right and left spiral grooves ...”. To suggest that this renders obvious the provision of an elastic cover layer is to read into the reference the substance of applicants’ disclosed invention, an improper hindsight rejection.

Examiner cites the Gao et al. reference as disclosing the claim limitations excerpted above and refers in support thereof to the passage in the text of the patent at col. 6, lines 58-65 and Figs. 10 and 12. For convenience, this text passage is reproduced below.

“As shown in Figs. 10 and 11, the platen roller 42 has a diameter D and a compliance, i.e. an ability to yield elastically, that is greater at opposite roller end portions 76,76 than at a roller main portion 78. The roller end portions 76,76 may have a rubber hardness of Shore A in the range of 30-80 and the roller main portion 78 may have a rubber hardness of Shore A in the range of 40-90 to make the roller end portions more compliant than the roller main portion.”

It is the roller itself that is provided with differing rubber hardness values (and diameters). There is clearly nothing in this passage that discloses or suggests the provision of “an elastic cover layer”.

The next paragraph goes on to describe the effect of the differing diameters and compliances (the diameter and compliance being respectively greater on the outer edges than in the main portion of the roller) on the relative stretching of the dye transfer layer as follows:

“... The roller edge portions 76,76 then apply a pressure against the two edge areas 6 and 7 that is greater than a pressure the roller main portion 78 applies against the dye transfer area 5. This difference in the pressure application causes the two edge areas 6 and 7 to be stretched substantially the same as the dye transfer area 6 when the edge areas and dye transfer area are subjected to the longitudinal tension imposed by the pulling force of the motorized donor take-up spool 54. As a result, the dye transfer area.” (col. 7, lines 10-20)

The only stretching here has to do with the stretching of the dye transfer layer and not with stretching (in any direction) of an “elastic cover layer”. Moreover, the compensatory stretching of the dye transfer layer is the result of a completely different mechanism, i.e. axial differences in the rubber hardness levels of the roller that results in differential compressions between the outer

edges of the dye transfer layer and the main portion to cause compensatory longitudinal stretching of the outer edges versus the main portion of the dye transfer layer in an effort to solve the creasing problem. Irrespective of the fact that this Gao et al. concept may solve the creasing problem, it does not render obvious the totally different concept of the claimed invention which is directed to solving the problem by provision of an elastic cover which is stretched laterally ("towards coaxial opposite ends of said roller") to spread the dye transfer layer in the crease forming regions.

It should be noted that neither Fig. 10 nor 12 shows "an elastic cover" and none is mentioned in reference to these figures.

As a consequence, it is submitted that the cited references do not teach disclose or suggest the present invention as set forth in claims 1, 3 and 15 and that the claims are therefore allowable thereover. Claim 2 is dependent from claim 1 and is believed, therefore to be allowable for the same reasons as given for claim 1.

Allowance of claims 5-14 is noted with appreciation.

It is respectfully submitted that, in view of the above amendments and remarks, this application is now in condition for allowance, which action is respectfully requested.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 40,802

Roland R. Schindler II/jrk
Rochester, NY 14650
Telephone: 585-588-2736
Facsimile: 585-477-1148